

CLAIMS

1. Method of making an electronic entity with encrypted access secure when said electronic entity  
5 comprises means for executing a cryptographic algorithm consisting in applying to an input message a succession of groups of operations known as "rounds" involving a series of respective sub-keys ( $K_0 \dots K_n$ ) produced successively by an iterative process starting from an initial key  $K$ , which  
10 method is characterized in that it consists in storing a result of an intermediate step ( $R_m, K_n$ ) of said iterative process, repeating at least some of the steps of said iterative process until a result is recalculated corresponding to the result that has been stored, comparing  
15 the value of said stored result to the value of the corresponding recalculated result, and prohibiting the broadcasting of an encrypted message (MC) resulting from the application of said algorithm if said two values are different.

20 2. Method according to claim 1, characterized in that it consists in storing a sub-key ( $K_n$ ) and repeating at least some of the steps of said iterative process until a sub-key is recalculated corresponding to said stored sub-key.

25 3. Method according to claim 1, characterized in that it consists in storing the value of an intermediate result ( $R_m$ ) of said iterative process and repeating at least a portion of said iterative process until an intermediate result is recalculated corresponding to the  
30 stored intermediate result.

4. Method according to claim 2, characterized in that it consists in storing the value of the final sub-key ( $K_n$ ) and repeating at least a final portion of the steps of producing the succession of said sub-keys until said final  
35 sub-key is calculated a second time.

5. Method according to claim 4, characterized in that it consists in repeating all of the steps of producing the succession of said sub-keys.

6. Method according to any preceding claim,  
5 characterized in that it is applied to a so-called AES algorithm that is known *per se*.

7. Method according to any of claims 1 to 6, characterized in that it is applied to a so-called DES algorithm that is known *per se*.

10 8. Autonomous electronic entity characterized in that it comprises means (13) for implementing the method according to any preceding claim.

9. Electronic entity according to claim 8,  
15 characterized in that it takes the form of a microcircuit card.